IPal

I hereby certify that the Proposition of the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

on May 11, 2004

Glenn P. Ladwig, Patent Attorney

INFORMATION DISCLOSURE

STATEMENT

Examining Group 1614

Patent Application

Docket No. UF-281D2

Serial No. 10/625,825

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

1614

Applicants

Anatoly E. Martynyuk, Donn Michael Dennis, Alexander V. Glushakov,

Colin Sumners, M. Ian Phillips

Serial No.

10/625,825

Filed

July 22, 2003

For

Materials and Methods for Treatment of Neurological Disorders Involving

Overactivation of Glutamatergic Ionotropic Receptors

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§1.97 AND 1.98

Sir:

In accordance with 37 CFR §1.97 and §1.98, the applicants would like to bring to the attention of the Examiner, the references cited in the following patent application:

U.S. Serial No. 09/957,358, filed September 19, 2001, now U.S. Patent No. 6,620,850.

The subject application, Serial No. 10/625,825, claims the benefit under 35 USC §120 of the filing date of patent application Serial No. 09/957,358. The applicants respectfully request that the copies of references supplied in the Information Disclosure Statements of the 09/957,358 application, as well as references cited during the prosecution thereof, be made of record in the 10/625,825 application. As copies of the references filed in the 09/957,358 application, and cited on the attached

ť,

Docket No. UF-281D2 Serial No. 10/625,825

form PTO/SB/08, can be found in the 09/957,358 casefile, copies of those references are not provided herewith.

It is respectfully requested that the references cited in the 09/957,358 application be considered in the examination of the subject application and that their consideration be made of record.

The applicants have also listed on form PTO/SB/08 references which have not been cited in the 09/957,358 application. These references are listed as cite numbers U15, F1, and R34-R36 on form PTO/SB/08. Copies of these documents are enclosed with this IDS. The applicants respectfully request that these references be made of record and considered in the examination of the subject application.

The applicants respectfully assert that the substantive provisions of 37 CFR §§1.97 and 1.98 are met by the foregoing statements.

Respectfully submitted,

Glenn P. Ladwig Patent Attorney

Registration No. 46,853

Phone No.:

352-375-8100

Fax No.:

352-372-5800

Address:

2421 N.W. 41st Street, Suite A-1

Gainesville, FL 32606-6669

GPL/mv

Attachments: Form PTO/SB/08 (4 pages); copies of some references cited.

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Inder the Happework Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

ide this box -> +

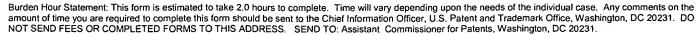
Complete if Known Substitute for form 1449A/PTO **Application Number** 10/625,825 July 22, 2003 Filing Date INFORMATION DISCLOSURE **First Named Inventor** Anatoly E. Martynyuk STATEMENT BY APPLICANT **Group Art Unit** 1614 **Examiner Name** (use as many sheets as necessary) UF-281D2 Sheet of 4 Attorney Docket Number

				U.S. PATENT DOCUMEN	TS	
Examiner Initials*	Cite U.S. Patent Document No. 1 Number Kind Code (if known)		Kind Code ²	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	U1	4,279,917		Takami et al.	07-21-1981	All
	U2	4,491,589		Dell et al.	01-01-1985	All
	U3	4,604,286		Kawajiri	08-05-1986	All
	U4	5,605,818		Katsumata et al.	02-25-1997	All
•	U5	6,013,672		Ye et al.	01-11-2000	All
	U6	6,084,084		Stormann et al.	07-04-2000	All
	U7	6,001,575		Huganir et al.	12-14-1999	All
	U8	6,362,226		Phillips, III et al.	03-26-2002	All.
	U9	5,789,444		Choi et al.	08-04-1998	All
	U10	5,447,948		Seibyl et al.	09-05-1995	All
	U11	5,089,517		Choi et al	02-18-1992	All
	U12	5,670,539		Richardson	09-23-1997	All
	U13	6,620,850	B2	Martynyuk et al.	09-16-2003	All
	U14	2003/0216472	A1	Martynyuk et al.	11-20-2003	All
	U15	10/489,807		Martynyuk et al. (patent application)	03-15-2004	All
	U16		\longrightarrow			
	U17				l l	

	FOREIGN PATENT DOCMENTS							
	Cite No. 1	Foreign Patent Document		Name of Patentee or	Date of Publication of	Pages, Columns, Lines,		
Examiner Initials*		Office	³ Number⁴	Kind Code⁵ (if known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	T ⁶
	F1	wo	03/024443	A1	Univ. of Florida	03-27-2003	All	
	F2							
	F3							
	F4							
	F5							
	F6							
	F7							
	F8							
	F9		_					
	F10							

Examiner	Date	
Signature	Considered	

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Please type a plus sign (+) inside this box -> +

Sheet

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid QMB control number.

Substitute for form 1449B/PTO
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

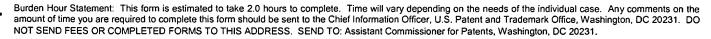
4

Complete if Known			
Application Number	10/625,825		
Filing Date	July 22, 2003		
First Named Inventor	Anatoly E. Martynyuk		
Group Art Unit	1614		
Examiner Name			
Attorney Docket Number	UF-281D2		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	R1	CHIARONI, P. et al. "A multivariate analysis of red blood cell membrane transports and plasma levels of L-Tyrosine and L-Tryptophan in depressed patients before treatment and after clinical improvement" Neuropsychobiology, 1990, 23:1-7.	
	R2	DOLLINS, A.B. et al. "L-Tyrosine ameliorates some effects of lower body negative pressure stress" <i>Physiology & Behavior</i> , 1995, 57(2):223-230.	
	R3	EATON, S.A. et al. "Competitive antagonism at metabotropic glutamate receptors by (S)-4-carboxyphenylglycine and (RS)-a-methyl-4-carboxyphenylglycine" European Journal of Pharmacology-Molecular Pharmacology Section, 1993, 244:195-197.	
	R4	GAGLIARDI, R.J. "Neuroprotection, excitotoxicicity and NMDA antagonists" Arq Neuropsiquiatr, 2000, 58(2-B):583-588.	
	R5	GALLOWAY, G.P. et al. "A historically controlled trial of tyrosine for cocaine dependence" Journal of Psychoactive Drugs, July-September 1996, 28(3):305-309.	
	R6	GELENBERG, A.J. et al. "Neurotransmitter precursors for the treatment of depression" <i>Psychopharmacology Bulletin</i> , January 1982, 18(1):7-18.	
	R7	HAJAK, G. et al. "The influence of intravenous L-Tryptophan on plasma melatonin and sleep in men" Pharmacopsychiat., 1991, 24:17-20.	
	R8	HELLER, B. et al. "Therapeutic action of D-phenylalanine in Parkinson's Disease" ArzneimForsch (Drug Res.), 1976, 26(4):577-579.	
		HOLLMANN, M. et al. "Cloned Glutamate Receptors" Annu. Rev. Neurosci., 1994, 17:31-108.	
	R9	KNOPFEL, T. et al. "Metabotropic glutamate receptors: Novel targets for drug development" Journal of Medicinal Chemistry, April 1995, 38(9):1417-1426.	
	R10 R11	MAIESE, K. et al. "Group I and Group II metabotropic glutamate receptor subtypes provide enhanced neuroprotection" Journal of Neuroscience Research, 2000, 62:257-272.	
	R12	MEYER, J.S. et al. "Neurotransmitter precursor amino acids in the treatment of multi-infarct Dementia and Alzheimer's Disease" Journal of the American Geriatrics Society, July 1977, 25(7):289-298.	
		OBRENOVITCH, T.P. "Excitotoxicity in neurological disorders—the glutamate paradox" Int. J. Devl. Neuroscience, 2000, 18:281-287.	
	R13	I	

Examiner	Date	
Signature	Considered	

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.





^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Please type a plus sign (+) inside this box -> +

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449B/PTO **Application Number** 10/625,825 INFORMATION DISCLOSURE **Filing Date** July 22, 2003 STATEMENT BY APPLICANT **First Named Inventor** Anatoly E. Martynyuk **Group Art Unit** 1614 (use as many sheets as necessary) **Examiner Name Attorney Docket Number** UF-281D2 Sheet 3 of 4

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		SAPOLSKY, R.M. "Cellular defenses against excitotoxic insults" <i>Journal of Neurochemistry</i> , 2001, 76:1601-1611.	
	R14		<u> </u>
	D45	SCHOEPP, D.D. et al. "Metabotropic glutamate receptors in brain function and pathology" TiPS, January 1993, 14:13-20.	
	R15	SEKIYAMA, N. et al. "Structure-activity relationships of new agonists and antagonists of different metabotropic	
	D46	glutamate receptor subtypes" British Journal of Pharmacology, 1996, 117:1493-1503.	
	R16	WATKINS, J. et al. "Phenylglycine derivatives as antagonists of metabotropic glutamate receptors" TiPS,	 -
	R17	September 1994, 15:333-342.	
		ZIPFEL, G.J. et al. "Neuronal apoptosis after CNS injury: The roles of glutamate and calcium" Journal of Neurotrauma, 2000, 17(10):857-869.	
	R18		
	R19	BELARDINELLI, L. et al. "1,3-Dipropyl-8-[2-(5,6-Epoxy)Norbornyl]Xanthine, a Potent, Specific and Selective A ₁ Adenosine Receptor Antagonist in the Guinea Pig Heart and Brain and in DDT ₁ MF-2 Cells" <i>J. Pharmacol. Exp. Ther.</i> , 1995, 275(3):1167-1176.	
		CHOI, D.W. "Excitotoxic Cell Death" <i>J. Neurobiol.</i> , 1992, 23(9):1261-1276.	
	R20		
	D04	DENNIS, D.M. et al. "Homologous Desensitization of the A ₁ -Adenosine Receptor System in the Guinea Pig Atrioventricular Node" J. Pharmacol. Exp. Ther., 1995, 272(3):1024-1035.	
	R21	KOSTYUK, P.G. et al. "Effects of intracellular administration of L-tyrosine and L-phenylalanine on voltage-	\vdash
		operated calcium conductance in PC12 pheochromocytoma cells" Brain Res., 1991, 550:11-14.	
	R22	KRYSTAL, J.H. et al. "NMDA Agonists and Antagonist as Probes of Glutamatergic Dysfunction and	
		Pharmacotherapies in Neuropsychiatric Disorders" Harv. Rev. Psychiatry, SeptOct. 1999, 7(3):125-143.	
	R23	LIPTON, S.A. and P.A. ROSENBERG "Excitatory Amino Acids as a Final Common Pathway for Neurologic	
		Disorders" N. Engl. J. Med., 1994, 330(9):613-622.	l
	R24	MARTYNYUK, A.E. et al. "Blocking effect of intraperitoneal injection of phenylalanine on high-threshold calcium	
		currents in rat hippocampal neurons" Brain Res., 1991, 552:228-231.	
	R25	MADTVNIVIIV A.E. et al. "Adoposino incressos notossium conductores in include abbit atti-	_
		MARTYNYUK, A.E. et al. "Adenosine increases potassium conductance in isolated rabbit atrioventricular nodal myocytes" Cardiovasc. Res. 1995, 30:668-675.	
	R26		

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box -> +

Sheet

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

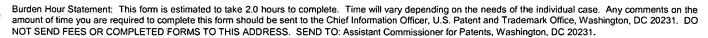
of

Complete if Known			
Application Number	10/625,825		
Filing Date	July 22, 2003		
First Named Inventor	Anatoly E. Martynyuk		
Group Art Unit	1614		
Examiner Name			
Attorney Docket Number	UF-281D2		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	R27	MARTYNYUK, A.E. <i>et al.</i> "Hyperkalemia Enhances the Effect of Adenosine on I _{KADO} in Rabbit Isolated AV Nodal Myocytes and on AV Nodal Conduction in Guinea Pig Isolated Heart" <i>Circulation</i> , 1999, 99:312-318.	
	R28	MOREY, T.E. et al. "Structure-Activity Relationships and Electrophysiological Effects of Short-Acting Amiodarone Homologs in Guinea Pig Isolated Heart" J. Pharmacol. Exp. Ther., 2001, 297(1):260-266.	
	R29	MOREY, T.E. et al. "Ionic Basis of the Differential Effects of Intravenous Anesthetics on Erythromycin-induced Prolongation of Ventricular Repolarization in the Guinea Pig Heart" Anesthesiology, 1997, 87:1172-1181.	
		SEUBERT, C.N. et al. "Midazolam Selectively Potentiates the A _{2A} . but not A ₁ . receptor-mediated Effects of Adenosine" <i>Anesthesiology</i> , 2000, 92:567-577.	
	R30	TANAKA, H. et al. "The AMPAR subunit GluR2: still front and center-stage" Brain Res., 2000, 886:190-207.	
	R31		<u> </u>
	R32	WEISS, J.H. and S.L. SENSI "Ca ²⁺ -Zn ²⁺ permeable AMPA or kainite receptors: possible key factors in selective neurodegeneration" <i>Trends Neurosci.</i> , 2000, 23(8):365-371.	
	R33	ZIMA, A. et al. "Antagonism of the Positive Dromotropic Effect of Isoproterenol by Adenosine: Role of Nitric Oxide, cGMP-dependent camp-phosphodiesterase and Protein Kinase G" J. Mol. Cell. Cardiol., 2000, 32:1609-1619.	
	R34	GLUSHAKOV, A.V. et al. "L-phenylalanine selectively depresses currents at glutamatergic excitatory synapses" <i>J. Neurosci. Res.</i> , 2003, 72:116-124.	
44.	R35	GLUSHAKOV, A.V. et al. "Specific inhibition of N-methyl-D-aspartate receptor function in rat hippocampal neurons by L-phenylalanine at concentrations observed during phenylketonuria" <i>Molecular Psychiatry</i> , 2002, 7:359-367.	
	R36	LIECHTY, E.A. et al. "Aromatic amino acids are utilized and protein synthesis is stimulated during amino acid infusion in the ovine fetus" J. Nutrition, 1999, 129:1161-1166.	
	R37		Ш
	R38		
-	R39		

Examiner	Date
Signature	Considered

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.





^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.